



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,658	01/13/2006	Hans-Helmut Bechtel	DE0300247	9677
24737 7590 10/07/2008 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER				
SUCH, MATTHEW W				
ART UNIT		PAPER NUMBER		
2891				
MAIL DATE		DELIVERY MODE		
10/07/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/564,658

Applicant(s)

BECHTEL ET AL.

Examiner

Matthew W. Such

Art Unit

2891

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 5 and 6 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1, 3, 5 and 6 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
4) ☐ Interview Summary (PTO-413)
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____
Paper No(s)/Mail Date _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 23 May 2008 has been entered.

Claim Objections

2. Claim 1 is objected to because of the following informalities: the phrase "is not more than 10% of the surface of the substrate" should read "is not more than 10% of a width of the surface of the substrate". Appropriate correction is required.
3. Claim 5 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. The claim recites "wherein the metallic structure exhibits a structure selected from the group of strips, grids, wavy lines, zigzag lines and sawtooth lines". The phrase "wherein the metallic structure exhibits" is a statement of the function or intended use for the metallic structure that does actually recites that the metallic structure has or comprises a structure of one of strips, grids, wavy lines, zigzag lines and sawtooth lines. Statements of intended use/function or statements that do not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. See MPEP § 2106 II

C and MPEP § 2111.04. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

4. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. The claim recites "wherein a pattern of the metallic structure matches an existing pattern in the layer assembly". However, the claim fails to limit exactly how the patterns of these two elements are matched. As such, any pattern for each element matches any pattern of the other element in some regard. Therefore, the claim fails to further limit the scope of the previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3 and 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Hosokawa (EP '035).

a. Regarding claim 1, Hosokawa teaches a substrate having a surface (Elements 1 and 6 in combination as shown in Fig. 1 and described on Page 9, Lines 50-52 as well as Page 20, Lines 39-50; both Elements 1 and 6 are glass as described on Page 8, Lines 2, 9 and 37 making a single substrate and described on Page 9, Lines 50-52 as well as Page 20, Lines 39-50). A metallic structure (Element 5, such as Al, is incorporated into the substrate (the Al is in the substrate as described on Page 9, Lines 50-52 and Page 20, Lines 41-44). The examiner notes that the phrase "a metallic structure" only requires one piece (one of Elements 5 or one Al film in one groove Page 9, Lines 50-52 and Page 20, Lines 41-44). A layer assembly comprising a first electrode of ITO (Element 2 and associated text, especially Page 20, Lines 45-47, for example), an electroluminescent layer (Element 3 and associated text, especially Page 5, Lines 49-50), and a second electrode (Element 4 and associated text, especially Page 5, Lines 50-51) is formed on the surface of the substrate. The metallic structure is in electrical contact with the first electrode (see, for example, Page 5, Line 56 and Page 20, Lines 47-49). A layer resistance of the metallic structure is lower than a layer resistance of the first electrode (Page 5, Lines 52; Page 6, Lines 15-17 and 45-58; Page 20, Lines 49-50, for example).

Furthermore, the language of "wherein light travels through the first electrode and the substrate to an observer" and "that obstructs the light from the observer", does not distinguish the claim from the structural limitations of the prior art. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir.

1997). See MPEP § 2112.01. Nevertheless, the device of Hosokawa functions in this manner.

A width of the metallic structure is 10 microns (Page 20, Line 42) and a width of the substrate is 100 millimeters (Page 20, Line 41). Therefore, the width of the metallic structure is not more than 10% of the width of the substrate since 10 microns is only 0.01% of 100 millimeters.

b. Regarding claim 3, the thickness of the metallic structure is 0.5 microns (see Page 20, Line 44) and the thickness of the first electrode is 100 nanometers (see Page 20, Lines 45-46). Since 0.5 microns is greater than 100 nanometers, the thickness of the metallic structure is greater than the thickness of the first electrode.

c. Regarding claim 5, as noted above, the term "the metallic structure exhibits" is a recitation of what the metallic structure does and how the metallic structure functions rather than a proper structural limitation. Nevertheless, the metallic structure of Hosokawa comprises strips, for example (Page 20, Lines 42-43).

d. Regarding claim 6, as noted above, the claim fails to limit exactly how the layer structure pattern is matched with the metallic structure. Therefore, any configuration meets the claim, such as the metallic structure being in direct physical contact with the layer assembly (as shown in Figure 1 and associated text, for example).

Response to Arguments

7. Applicant's arguments with respect to claims 1, 3 and 5-6 have been considered but are moot in view of the new ground(s) of rejection.

Related Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- i. Noguchi ('955), Yamazaki ('431), Ishikawa ('358) and Lu ('697) each teach conventional organic electroluminescent device configurations;
- ii. Terao ('581), Namiki ('936), Feldman ('391), Yamanaka ('036), Heller ('659), Yoshida ('252), Eida ('467), Kim ('448) and Kim ('765) each teach configurations for lowering the resistance of transparent electrodes by using thin-width low resistance metallic auxiliary electrodes.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew W. Such whose telephone number is (571) 272-8895. The examiner can normally be reached on Monday - Friday 9AM-5PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue Purvis can be reached on (571) 272-1236. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew W. Such
Examiner, Art Unit 2891

MWS
9/25/08

/Douglas M Menz/
Primary Examiner, Art Unit 2891
9/30/08